

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 09-037124

(43)Date of publication of application : 07.02.1997

(51)Int.CI.

H04N 5/225

(21)Application number : 07-185280

(71)Applicant : HITACHI LTD

(22)Date of filing : 21.07.1995

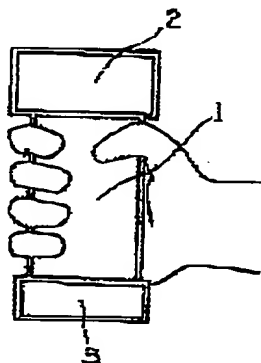
(72)Inventor : ISHIGURO SHINICHI
NEMOTO RYUICHI
UMEZAWA KOICHI
SATO ATSUTOSHI

(54) IMAGE PICKUP PART INTEGRATED RECORDER

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a grip form with which a holding attitude is natural.

SOLUTION: A recording part 1 is longitudinally arranged, other components are combined so as to be longitudinally extended, components such as image pickup part 2 and battery 3 are arranged on upper and lower surfaces, for example, and the main body of an image pickup part integrated recorder is made longitudinally long. With this longitudinally long constitution, the gun grip form can be provided so that photographing can be easily performed in the stable attitude of holding with one hand even when performing photographing while peeping a view finder or visually performing photographing without peeping it.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office

(19) 日本国特許庁 (J P)

(12) 公開特許公報 (A)

(11) 特許出願公開番号

特開平9-37124

(43) 公開日 平成9年(1997)2月7日

(51) Int.Cl.⁸

H04N 5/225

識別記号

庁内整理番号

F I

H04N 5/225

技術表示箇所

Z

審査請求 未請求 請求項の数 4 O L (全 3 頁)

(21) 出願番号 特願平7-185280

(22) 出願日 平成7年(1995)7月21日

(71) 出願人 000005108

株式会社日立製作所

東京都千代田区神田駿河台四丁目6番地

(72) 発明者 石黒 信一

茨城県ひたちなか市稲田1410番地株式会社

日立製作所パーソナルメディア機器事業部
内

(72) 発明者 根本 隆一

東京都国分寺市東恋ヶ窪一丁目280番地株

式会社日立製作所デザイン研究所内

(74) 代理人 弁理士 小川 勝男

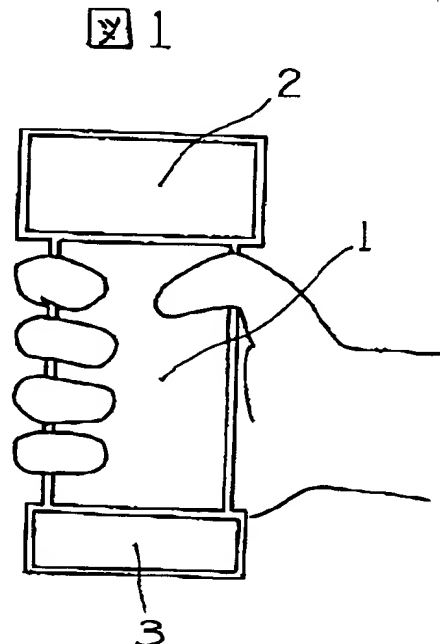
最終頁に続く

(54) 【発明の名称】 撮像部一体型記録装置

(57) 【要約】

【構成】記録部1を縦方向に配置し、他の構成要素を縦方向に長くなるよう組み合わせ、例えば上下面に撮像部2、バッテリー3の構成要素を配置し、撮像部一体型記録装置本体を縦長にする。

【効果】縦長の構成により、ガングリップ形状が可能になり、ビューファインダを覗いて撮影する場合でも、覗かずに目測で撮影する場合でも、片手での安定した保持姿勢で撮影しやすいグリップ形状を得られた。



【特許請求の範囲】

【請求項1】動画および／または静止画を撮像部で得られる信号として記録部に記録し、再生可能な撮像部一体型記録装置において、前記記録部を縦長方向に配置し、その上面に前記撮像部及びビューファインダ部、下面にバッテリーを配置することを特徴とする撮像部一体型記録装置。

【請求項2】動画および／または及び静止画を撮像部で得られる信号として記録部に記録し、再生可能な撮像部一体型記録装置において、前記記録部を縦長方向に配置し、その上面に撮像部及びビューファインダ部、側面に薄型のバッテリーを配置することを特徴とする撮像部一体型記録装置。

【請求項3】請求項1または2において、側面に液晶ディスプレイを備えた撮像部一体型記録装置。

【請求項4】請求項1または2において、上面のビューファインダの代わりに、ヒンジにより支持し回転可能とした液晶ディスプレイを側面に備えた撮像部一体型記録装置。

【発明の詳細な説明】

【0001】

【産業上の利用分野】本発明は、撮像部、記録部、バッテリー等、撮像部一体型記録装置に関する。

【0002】

【従来の技術】従来の撮像部一体型記録装置、主にビデオカメラは記録部を横長方向に配置し、他の構成要素をそのまわりに配置していた。いずれの場合も本体は、前後方向に長くなり、多くのビデオカメラのグリップでは必然的に指先が上を向く形態であった。この形態ではビューファインダを覗いて撮影する場合、手首は自然な角度になるが、ビューファインダを覗かずに目測で記録装置を撮影物に向け撮影する場合、保持位置によっては、手首に無理のかかる姿勢になる。他の、撮像部一体型記録装置においてもスチルカメラや双眼鏡の様なグリップ形態に限られ、片手での保持では不安定であった。

【0003】

【発明が解決しようとする課題】本発明の目的は、ビューファインダを覗いて撮影する場合でも、ビューファインダを覗かずに撮影する場合でも、撮像部一体型記録装置の各デバイスの構成により、本体のサイズを特別に大きくせずとも、片手で保持でき、保持姿勢に無理のないグリップ形状を提供することにある。

【0004】

【課題を解決するための手段】上記課題を解決するため

に、記録部はハードディスク、または、半導体メモリ等の小型のものとし、これを縦長方向に配置し、他の構成要素を縦方向に長くなるよう組み合わせ、例えば上面に撮像部、バッテリー等の構成要素を配置し、撮像部一体型記録装置本体を縦長にする。

【0005】

【作用】上記のように撮像部一体型記録装置本体を縦長にすると、図1に示すような、ガングリップ形状を特別な構造を必要とせず容易に得ることができ、また、幅の薄い形態にすることもできる。

【0006】

【実施例】図2は実施例1の説明図である。記録部と基板を重ね合わせ縦長方向に配置し、上面に撮像部及びビューファインダ部を配置し、下面にバッテリーを配置する。記録部と基板を覆う筐体がガングリップ部になる。

【0007】図3は実施例2の斜視図である。記録部と基板、及び薄型のバッテリーを重ね合わせ縦長方向に配置し、上面にレンズ部及びビューファインダ部を配置する。記録部と基板及びバッテリーを覆う筐体がガングリップ部になる。

【0008】図4は実施例3の撮影時の斜視図である。縦長に構成された本体の側面に、ヒンジにより支持され回転可能な液晶ディスプレイを備える。この液晶ディスプレイは収納時にはコンパクトになるよう閉じられるが、撮影時にはヒンジによる回転により撮影者の方を向く。また、再生時には収納時から180度近くまで回転するようにしても良い。

【0009】

【発明の効果】上記構成からなるガングリップ形状により片手で保持でき、撮影時の手首の自由度が増し、保持位置に左右されない安定した保持姿勢となり撮影しやすくなる。さらに、小型薄型の記録部を用い本体を縦長にすることで、幅の薄い形態にでき収納性や携帯性が改善され、ポケット等にいられて持ち運べるようになった。

【図面の簡単な説明】

【図1】本発明による撮像部一体型記録装置の保持姿勢、ガングリップ部の説明図。

【図2】本発明の実施例1の内部の斜視図。

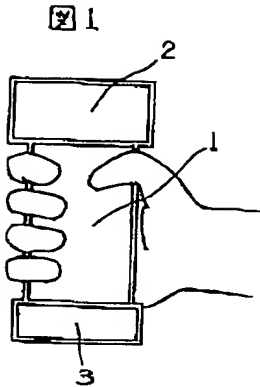
【図3】本発明の実施例2の内部の斜視図。

【図4】本発明の実施例3の撮影時の斜視図。

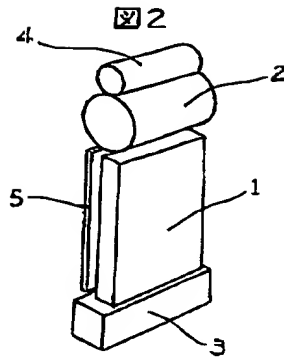
【符号の説明】

1…記録部、2…撮像部、3…バッテリー、4…ビューファインダ部、5…基板、6…薄型バッテリー、7…液晶ディスプレイ、8…ヒンジ部。

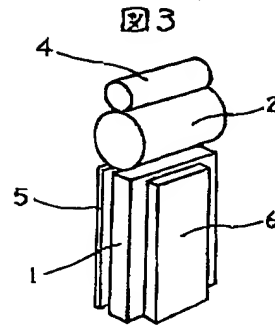
【図1】



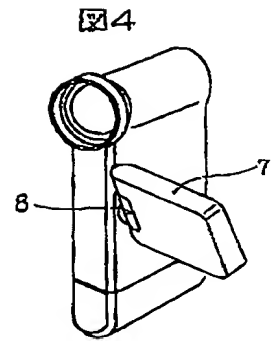
【図2】



【図3】



【図4】



フロントページの続き

(72) 発明者 梅澤 功
東京都国分寺市東恋ヶ窪一丁目280番地株
式会社日立製作所デザイン研究所内

20 (72) 発明者 佐藤 敦俊
東京都国分寺市東恋ヶ窪一丁目280番地株
式会社日立製作所デザイン研究所内

*** NOTICES ***

JPO and NCIPi are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. **** shows the word which can not be translated.
3. In the drawings, any words are not translated.

CLAIMS

[Claim(s)]

[Claim 1] The image pick-up section one apparatus recording apparatus characterized by recording an animation and/or a still picture on the Records Department as a signal acquired in the image pick-up section, stationing said Records Department in the longwise direction in a refreshable image pick-up section one apparatus recording apparatus, arranging said image pick-up section and the viewfinder section on the top face, and arranging a dc-battery on the inferior surface of tongue.

[Claim 2] The image pick-up section one apparatus recording apparatus characterized by reaching, recording a still picture on the Records Department as an animation and/or a signal acquired in the image pick-up section, stationing said Records Department in the longwise direction in a refreshable image pick-up section one apparatus recording apparatus, and arranging a thin dc-battery on the image pick-up section and the viewfinder section, and a side face to the top face.

[Claim 3] The image pick-up section one apparatus recording device which equipped the side face with the liquid crystal display in claims 1 or 2.

[Claim 4] The image pick-up section one apparatus recording device which equipped the side face with the liquid crystal display which supported with the hinge and was made pivotable instead of the viewfinder on top in claims 1 or 2.

[Translation done.]

* NOTICES *

JPO and NCIPi are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. **** shows the word which can not be translated.
3. In the drawings, any words are not translated.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Industrial Application] This invention relates to image pick-up section one apparatus recording devices, such as the image pick-up section, the Records Department, and a dc-battery.

[0002]

[Description of the Prior Art] The video camera has stationed the Records Department at landscape orientation to the conventional image pick-up section one apparatus recording apparatus and the Lord, and other components were arranged around it. In any case, it was the gestalt a body becomes long at a cross direction and a fingertip turns [gestalt] to a top inevitably by the grip of many video cameras. With this gestalt, when looking into a viewfinder and taking a photograph, a wrist becomes a natural include angle, but when turning a recording device to a photography object and photoing it by eye measurement, without looking into a viewfinder, depending on a maintenance location, it becomes the posture for which a wrist is impossible. Also in other image pick-up section one apparatus recording apparatus, it was restricted to a grip gestalt like a still camera or a binocular, and was unstable in maintenance single hand.

[0003]

[Problem(s) to be Solved by the Invention] The purpose of this invention is not to enlarge size of a body specially, but also able to hold ** single hand, and offer the grip configuration with a maintenance posture impossible for which is not by the configuration of each device of an image pick-up section one apparatus recording apparatus, even when looking into a viewfinder and taking a photograph, and even when taking a photograph, without looking into a viewfinder.

[0004]

[Means for Solving the Problem] In order to solve the above-mentioned technical problem, the Records Department considers as small things, such as a hard disk or semiconductor memory, arranges this in the longwise direction, it combines other components so that it may become long in a lengthwise direction, for example, it arranges components, such as the image pick-up section and a dc-battery, to a vertical side, and makes longwise the body of an image pick-up section one apparatus recording device.

[0005]

[Function] If the body of an image pick-up section one apparatus recording device is made longwise as mentioned above, special structure cannot be needed, a gang lip configuration as shown in drawing 1 can be acquired easily, and it can also be made a gestalt with thin width of face.

[0006]

[Example] Drawing 2 is the explanatory view of an example 1. The Records Department and a substrate are arranged in the superposition longwise direction, the image pick-up section and the viewfinder section are arranged on the top face, and a dc-battery is arranged on the inferior surface of tongue. A wrap housing becomes the gang lip section about the Records Department and a substrate.

[0007] Drawing 3 is the perspective view of an example 2. The Records Department, a substrate, and a thin dc-battery are arranged in the superposition longwise direction, and the lens section and the viewfinder section are arranged on the top face. A wrap housing becomes the gang lip section about the Records Department, a substrate, and a dc-battery.

[0008] Drawing 4 is a perspective view at the time of photography of an example 3. It is supported with a hinge by the side face of the body constituted longwise, and it is equipped with a pivotable liquid crystal display. Although this liquid crystal display is closed at the time of receipt so that it may become compact, it turns to

photography persons by rotation by the hinge at the time of photography. Moreover, you may make it rotate from the time of receipt to about 180 degrees at the time of playback.

[0009]

[Effect of the Invention] It can hold single hand with the gang lip configuration which consists of the above-mentioned configuration, and the degree of freedom of the wrist at the time of photography serves as a stable maintenance posture which is not influenced by increase and the maintenance location, and it becomes easy to take a photograph. Furthermore, by making a body longwise using the small thin Records Department, it is made to a gestalt with thin width of face, storability and portability are improved, and it puts into a pocket etc., and can carry now.

[Translation done.]

*** NOTICES ***

JPO and NCIPi are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. **** shows the word which can not be translated.
3. In the drawings, any words are not translated.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] The maintenance posture of the image pick-up section one apparatus recording device by this invention, the explanatory view of the gang lip section.

[Drawing 2] The perspective view inside the example 1 of this invention.

[Drawing 3] The perspective view inside the example 2 of this invention.

[Drawing 4] The perspective view at the time of photography of the example 3 of this invention.

[Description of Notations]

1 [-- The viewfinder section, 5 / -- A substrate, 6 / -- A thin dc-battery, 7 / -- A liquid crystal display, 8 / -- Hinge region.] -- The Records Department, 2 -- The image pick-up section, 3 -- A dc-battery, 4

[Translation done.]

* NOTICES *

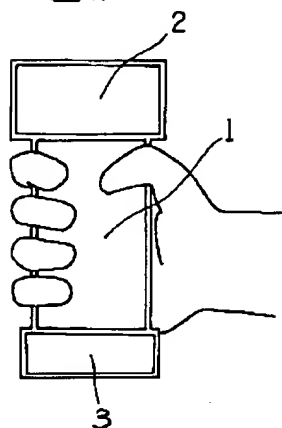
JPO and NCIPi are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. **** shows the word which can not be translated.
3. In the drawings, any words are not translated.

DRAWINGS

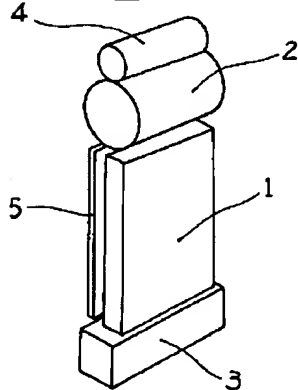
[Drawing 1]

1



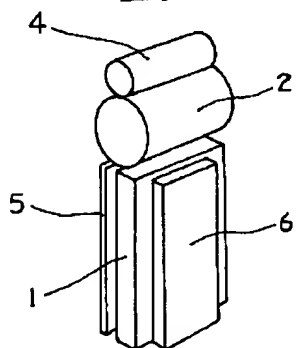
[Drawing 2]

2

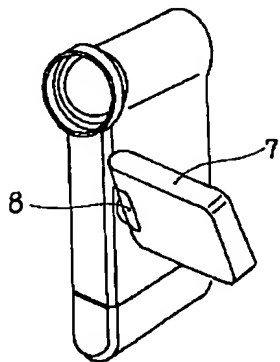


[Drawing 3]

3



[Drawing 4]
[4]



[Translation done.]